

May 10, 2001

Mr. Steve Kuhlman
Central Corrugated
5645 W. 82nd St.
Indianapolis, IN. 46278

Re: 097-12789-00312
First Administrative Amendment to
CP 965052

Dear Mr. Kuhlman:

Central Corrugated was issued a permit on 10/28/96 for the construction of a corrugator line and a natural gas fired boiler. A letter requesting the inclusion of condition 40 CFR 60.48c(g) and an alteration of fuel usage record keeping from daily to monthly was received on 10/02/00. In addition, the plant identification number was changed to 097-00312. Refer to the new plant ID when corresponding with IDEM or ERMD. The permit is hereby administratively amended as follows:

Operation Condition 15 was added on page six (6) of six (6) of the permit as follows:

15. Monthly natural gas consumption for the Cleaver Brooks natural gas fired boiler with maximum capacity of 25.106 MMBTU/hr shall be recorded as per 40 CFR Part 60 Subpart Dc and USEPA Memorandum of February 20, 1992. Records shall be retained for a period of at least two (2) years from the date of generation of the measurement or record.

If the IDEM OAQ or ERMD makes a request for records to the Permittee, the Permittee shall furnish the records to the IDEM OAQ or ERMD within a reasonable time.

All other conditions of the permit shall remain unchanged and in effect. Please attach a copy of this amendment and the following revised permit pages to the front of the original permit.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact Scott Dombrowski at (317) 327-2176.

Sincerely,

Daniel B. Dovenbarger,
Administrator, ERMD.

Attachments-amended construction permit page

cc: U.S. EPA, Region V
Mindy Hahn, IDEM OAM

S.L.D.

**CONSTRUCTION PERMIT
AIR QUALITY MANAGEMENT BRANCH**

Environmental Resources Management Division
2700 South Belmont Avenue
Indianapolis, Indiana 46221-2097

**Central Corrugated, Incorporated
5645 West 82nd Street
Indianapolis, Indiana 46278**

is hereby authorized to construct

- a) Corrugator Line with a maximum capacity of 135,000 tons of paper per year
- b) Cleaver Brooks natural gas fired boiler with maximum capacity of 25.106 MMBTU/hr

THIS PERMIT IS ISSUED UNDER THE PROVISIONS OF IAPCB REG. IX-1, 326 IAC 2-1 and 40 CFR 52.780, WITH CONDITIONS LISTED ON THE ATTACHED PAGES.

Identification No. **CP 965052-1**
ID 5052-0001

Construction Conditions

1. That the data and information supplied with the application shall be considered part of this permit. Prior to any proposed change in construction which may affect allowable emissions, the change must be approved by the Environmental Resources Management Division (ERMD), Air Quality Management Branch.
2. That this permit to construct does not relieve the permittee of the responsibility to comply with the provisions of the Chapter 4 of the Code of Indianapolis and Marion County and the regulations promulgated thereunder, Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.
3. That pursuant to IAPCB Regulation IX-1 (Permits) and IC 13-15-5-3, this permit becomes effective upon its issuance.
4. That pursuant to IAPCB Regulation IX-1 (Permits) and 326 IAC 2-1-9(b)(Revocation of Permits), this permit may be revoked if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is discontinued for a period of one (1) year or more.
5. That notwithstanding Construction Condition No. 6, all requirements and conditions of this construction permit shall remain in effect unless modified in a manner consistent with procedures established for modifications of construction permits pursuant to IAPCB Regulation IX-1 (Permits) and 326 IAC 2 (Permit Review Rules).
6. That this document shall also become a first-time operation permit pursuant to IAPCB Regulation IX-1 (Permits) and 326 IAC 2-1-4 (Operating Permits) when, prior to start of operation, the following requirements are met:
 - (a) The attached affidavit of construction shall be submitted to the Environmental Resources Management Division (ERMD), Air Quality Management Branch, verifying that the facilities were constructed as proposed in the application. The facilities covered in the Construction Permit may begin operating on the date the Affidavit is postmarked or delivered to ERMD. If construction is completed in phases; i.e., the entire construction is not done continuously, a separate affidavit must be submitted for each phase of construction. Any permit conditions associated with operation start up dates such as stack testing for New Source Performance Standards (NSPS) shall be applicable to each individual phase.
 - (b) Permittee shall receive an Operation Permit Validation Letter from the Environmental Resources Management Division (ERMD) and attach it to this document.

That the operation permit will be subject to annual operating permit fees pursuant to IAPCB Sec. 4-52 (Permit fees).

That pursuant to IAPCB Regulation IX-1 (Permits), the permittee shall apply for an operation permit renewal at least ninety (90) days prior to the expiration date established in the validation letter. The operation permit issued shall contain as a minimum the conditions in the Operation Conditions section of this permit.

7. That an application for an operation permit must be made ninety (90) days before start up to the Environmental Resources Management Division (ERMD), Air Quality Management Branch. The operation permit issued by the Environmental Resources Management Division (ERMD) shall contain as a minimum the conditions in the Operation Conditions section of this permit.
8. That pursuant to the New Source Performance Standards (NSPS), Part 60.7, Subpart A, the source owner/operator is hereby advised of the requirement to report the following at the appropriate times:
 - a) Commencement of construction date (no later than 30 days after such date);
 - b) Anticipated start-up date (not more than 60 days or less than 30 days prior to such date);
 - c) Actual start-up date (within 15 days after such date); and
 - d) Date of performance testing (at least 30 days prior to such date), when required by a condition elsewhere in this permit.

Reports are to be sent to:

**Compliance Data Group
Air Quality Management Branch
Environmental Resources Management Division
2700 South Belmont Avenue
Indianapolis, IN 46221-2097**

The application and enforcement of these standards have been delegated to the ERMD. The requirements of 40 CFR Part 60 are also federally enforceable.

9. That when the facility is constructed and placed into operation the following operation conditions shall be met:

Operation Conditions

1. That the data and information supplied in the application shall be considered part of this permit. Prior to any change in the operation which may result in an increase in allowable emissions exceeding those specified in IAPCB Regulation IX-1 (Permits) and 326 IAC 2-1-1 (Construction and Operating Permit Requirements), the change must be approved by the Environmental Resources Management Division (ERMD), Air Quality Management Branch.
2. That the permittee shall comply with the provisions of the Chapter 4 of the Code of Indianapolis and Marion County and the regulations promulgated thereunder, Indiana Environmental Management Law
(IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder.
3. That pursuant to 326 IAC 1-6-3 (Preventive Maintenance Plans), Central Corrugated, Incorporated shall prepare and maintain a preventive maintenance plan, including the following information:

- (a) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices.
- (b) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions.
- (c) Identification of the replacement parts which will be maintained in inventory for quick replacement.

The preventive maintenance plan shall be submitted to Environmental Resources Management Division (ERMD) upon request and shall be subject to review and approval.

4. That pursuant to IAPCB Regulation IX-1 (Permits) and 326 IAC 2-1-6 (Transfer of Permits):
 - (a) In the event that ownership of this corrugated paper production is changed, Central Corrugated, Incorporated shall notify Environmental Resources Management Division, Air Quality Management Branch and OAM, Permit Branch, within thirty (30) days of the change. Notification shall include the date or proposed date of said change.
 - (b) The written notification shall be sufficient to transfer the permit from Central Corrugated, Incorporated to the new owner.
 - (c) The ERMD and OAM shall reserve the right to issue a new permit.
5. That pursuant to IAPCB Regulation IX-1 (Permits) and 326 IAC 2-1-9(a) (Revocation of Permits), this permit to construct and operate may be revoked for any of the following causes:
 - (a) Violation of any conditions of this permit.
 - (b) Failure to disclose all the relevant facts, or misrepresentation in obtaining this permit.
 - (c) Changes in regulatory requirements that mandate either a temporary or permanent reduction of discharge of contaminants. However, the amendment of appropriate sections of this permit shall not require revocation of this permit.
 - (d) Noncompliance with the orders issued pursuant to IAPCB Regulation V-2 (Emergency Reduction Plans) and 326 IAC 1-5 (Episode Alert Levels) to reduce emissions during a air pollution episode.
 - (e) For any cause which establishes in the judgment of ERMD and IDEM, the fact that continuance of this permit is not consistent with purposes of IAPCB Regulation IX-1 (Permits) and 326 IAC 2-1 (Permit Review Rules).
6. That a copy of this permit shall be available on the premises of the source.
7. That pursuant to IAPCB Regulation II-2 and 326 IAC 6-1-2 (Nonattainment area particulate limitations) the PM emissions from Corrugator Line shall be limited to 0.03 gr/dscf.
8. That maximum capacity of Corrugator Line shall be limited to 135,000 tons per year with maximum amount of scrap generated limited to 11,000 tons/year

9. That the Corrugator Line shall not be operated without the cyclone.
10. That pursuant to IAPCB Regulation XIII (Annual emission statement rule) and 326 IAC 2-6 (Emission Reporting), the owner/operator of Central Corrugated, Incorporated must annually submit an emission statement for the facility. This statement must be received by April 15 of each year and must comply with the minimum requirements specified in IAPCB Regulation XIII (Annual emission statement rule) and 326 IAC 2-6-4. A copy of this rule is enclosed. The annual statement must be submitted to:

**Compliance Data Group
Air Quality Management Branch
Environmental Resources Management Division
2700 South Belmont Avenue
Indianapolis, Indiana 46221-2097**

11. That pursuant to IAPCB Regulation I (Smoke and other visible emissions) and 326 IAC 5-1-2 (Visible Emission Limitations) except as provided in IAPCB Regulation I(B) (Exception) and 326 IAC 5-1-3 (Temporary Exemptions), the visible emissions shall meet the following:
 - a) visible emissions shall not exceed an average of 30% opacity in 24 consecutive readings.
 - b) visible emissions shall not exceed 60% opacity for more than a cumulative total of 15 minutes (60 readings) in a 6-hour period.
12. That pursuant to 326 IAC 6-2-4, the particulate matter (PM) emissions from the 25.106 million BTU/hour boiler shall be limited to 0.48 pounds/MMBTU heat input.
13. That a log of information necessary to document compliance with operation permit condition no/s. 7,8 shall be maintained. These records shall be kept for at least the past 36 month period and made available upon request to the ERMD. A yearly summary shall be submitted to:

**Compliance Data Group
Air Quality Management Branch
Environmental Resources Management Division
2700 South Belmont Avenue
Indianapolis, Indiana 46221-2097**

within 30 days after the end of the year in the format attached. This report shall include corrugated paper waste generated on the monthly basis.

14. That the owner/operator shall notify the Environmental Resources Management Division (ERMD) if Corrugator Line production will be changed due to stoker replacement or by any other cause. The owner/operator shall submit the notice in advance of such change at time sufficient to allow review, discussion and permit revision. The notice shall include, but not limited to, information describing the precise nature of change, line production and PM emissions rate before and after the change, and the anticipated start and completion date of the change.
15. Monthly natural gas consumption for the Cleaver Brooks natural gas fired boiler with maximum capacity of 25.106 MMBTU/hr shall be recorded as per 40 CFR Part 60 Subpart Dc and USEPA Memorandum of February 20, 1992. Records shall be retained for a period of at least two (2) years from the date of generation of the measurement or record.

Engineer Date

Administrator Date

Company Name:	Central Corrugated, Incorporated
Location:	5645 West 82nd Street, Indianapolis, Indiana 46278
Permit No.:	CP 965052-01, ID 5052-0001
Source:	corrugated paper production
Pollutant:	PM
Limit:	0.03 gr/dscf (Potential amount of paper scrap generated - 11,000 ton/yr)

Month	Paper waste , tons/month
Total	

Date: _____

**Environmental Resources Management Division
Air Quality Management Branch**

Technical Support Document (TSD) for New Construction and Operation

**Central Corrugated, Incorporated
5645 West 82nd Street
Indianapolis, Indiana 46278**

The Environmental Resources Management Division (ERMD) has reviewed an application from Central Corrugates, Incorporated relating to the construction and operation of Corrugator Line and replacement of Johnston Boiler (11.4 MMBTU/hr) by Cleaver Brooks natural gas fired boiler of 25.106 MMBTU/hr .

Company produced corrugated paper. The production line includes a cyclone that is not an emission control unit. The cyclone is a part of production line and used only for collecting waste paper. The Corrugator Line has a maximum production of 30,812.5 lb of paper per hour. The facility operates 24 hours/day, 5 days a week. The steam generated by the boiler is used in production line.

Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (°F)
1	boiler	28	2	9,300	367
2	cyclone	38	8	14,040	70

Enforcement Issue

ERMD is aware that those facilities have been constructed and operated prior to receipt of the proper permit. ERMD is reviewing this matter and will take appropriate action. This proposed permit is intended to satisfy the requirements of the construction permit rules.

Recommendation

The staff recommends to the Administrator that the construction and operation be approved. This recommendation is based on the following facts and conditions:

An application for the purposes of this review was received on May 13, 1996, with additional information received on August 29, 1996.

Emissions Calculations

See Appendix A (Emissions Calculation Spreadsheet) for detailed calculations boiler emissions.

a) **25.106 MMBTU/hr natural gas fired boiler.**

Pollutant	Emission factor, lb/mmcf	Emissions, ton/yr
PM	13.7	1.5
PM10	13.7	1.5
SO ₂	0.6	0.1
VOC	2.8	0.3
CO	35	3.8
NO _x	140	15.4

b) **Corrugated Line emissions**

Maximum corrugator line speed - 500 ft/min (limited by stoker production rate)

Maximum corrugator line width - 85"

Conversion factor - 0.145 lb/sq ft

Maximum percent of scrap generated - 8.0%

Maximum percent of dust in the scrap - 0.5%

Cyclone efficiency - 85%

Maximum production rate = 500 ft/min * 85" * 1 ft/12" * 60 min = 212,500 sq ft/hr * 0.145 lb/sq ft =
30,812.5 lb/hr * 8760 hr/yr * 1 ton/2000 lb = 134,958.75 ton/yr

Maximum amount of scrap = 30,812.5 lb/hr * 0.08 = 2465 lb/hr * 8760 hr/yr * 1 ton/2000 lb = 10,797 tn/yr

Maximum amount of dust entered the cyclone = 2465 lb/hr * 0.005 = 12.325 lb/hr * 8760 hr/yr * 1 ton/2000 lb = 53.98 ton/yr

The potential PM emissions from cyclone = 53.98 ton/yr * ((100%-85%)/100%) = 8.1 ton/yr

Total Allowable Emissions

Indiana Permit Allowable Emissions Definition (after compliance with applicable rules, based on 8,760 hours of operation per year at rated capacity):

Pollutant	Emissions (tons/year)
PM	9.6
PM10	9.6
SO ₂	0.1
VOC	0.3
CO	3.8
NO _x	15.4

Allowable emissions (as defined in the Indiana Rule) of PM and NO_x are greater than 25 lb per day. Therefore, pursuant to IAPCB Regulation IX-1, (Permits), a construction permit is required.

County Attainment Status

Marion County has been classified as nonattainment for PM and SO₂ emissions. Therefore, these emissions were reviewed pursuant to the requirements for Emission Offset IAPCB Regulation IX-3 and 326 IAC 2-3.

Source Status

Existing Source PSD Definition (allowable emissions from existing source ID 5052):

Pollutant	Emissions (ton/yr)
PM	0.65
PM10	0.65
SO ₂	24.9
VOC	0.14
CO	1.76
NO _x	7.05

This existing source is not a major stationary source because no nonattainment regulated pollutant is emitted at a rate of 100 tons per year. Therefore, IAPCB Regulation IX-3 (Emission Offsets) and 326 IAC 2-3 do not apply.

Proposed Modification

The new restricted allowable emissions for Central Corrugated will be:

Pollutant	Emissions (tn/yr)	PSD/EO significant level (th/yr)
PM	9.6	25.0
PM10	9.6	15.0
SO ₂	0.1	40.0
VOC	0.3	40.0
CO	3.8	100.0
NO _x	15.4	40.0

With the new allowable emissions the source will continue to be a minor stationary source. None of the regulated pollutants is a subject to the requirements for Emission Offset IAPCB Regulation IX-3 and 326 IAC 2-3.

Federal Rule Applicability

The Cleaver Brooks Boiler is subject to the New Source Performance Standards per IAPCB Regulation XV and 326 IAC 12, (40 CFR Part 60.40_c, Subpart Dc). There are no applicable standards for sulfur dioxide and particulate matter, but applicable reporting and recordkeeping requirements do apply.

State Rule Applicability

326 IAC 2-6 (Emission Reporting)

The source is subject to 326 IAC 2-6 (Emission Reporting), because it located in Marion County and has potential to emit more than 10 tons/yr of oxides of nitrogen. Pursuant to this rule, the owner/operator of this facility must annually submit an emission statement of the facility. The annual statement must be received by April 15 of each year and must contain the minimum requirements as specified in 326 IAC 2-6-4. A copy of the applicable rule will be enclosed with the permit.

326 IAC 6-2 (Particulate Emissions Limitations for Sources of Indirect Heating)

The 25.106 MMBTU/hr natural gas fired boiler is subject 326 IAC 6-2 (Particulate Emissions Limitations for Sources of Indirect Heating). Pursuant to 326 IAC 6-2-4, the particulate matter (PM) emissions shall be limited to 0.048 pounds per million BTU heat input.

Allowable emissions:

$$PM = 1.09/Q^{0.26}$$

where: PM = lb/MMBTU

Q = total source maximum operating capacity, in MMBTU/hr

$$PM = 1.09/25.106^{0.26} = 0.48 \text{ lb/MMBTU}$$

$$\begin{aligned} \text{Allowable PM emissions} &= 0.48 \text{ lb/MMBTU} * 25.106 \text{ MMBTU/hr} = 12.05 \text{ lb/hr} * 8760 \text{ hr/yr} * 1 \\ \text{ton/2000} \quad \text{lb} &= 52.78 \text{ tons/yr} \end{aligned}$$

Since the PM potential emissions are less than PM allowable emissions, therefore, the boiler complies with this requirements.

326 IAC 6-1-2 (Nonattainment area particulate limitations)

The Corrugator line is subject to 326 IAC 6-1-2 (a). The particulate emissions shall be limited to 0.03 grain per dry standard cubic foot.

$$\begin{aligned} \text{Allowable PM emissions} &= 0.03 \text{ gr/dscf} * 14,040 \text{ dscfm} * 60 \text{ min} * 1 \text{ lb/7000 gr} = 3.61 \text{ lb/hr} * 8760 \\ \text{hr/yr} \quad * 1 \text{ ton/ 2000 lb} &= 15.81 \text{ ton/yr} \end{aligned}$$

Since the PM potential emissions are less than PM allowable emissions, therefore, the Corrugator Line complies with this requirements.

326 IAC 5-1-2 (Visible Emissions Limitations)

The source is subject to opacity limitations under this rule - visible emissions shall not exceed an average of 30% opacity in 24 consecutive readings.

Local Rule Applicability

IAPCB Regulation IX-1 (Permits)

Construction and operating permit requirements.

IAPCB Regulation XXIII (Annual Emission Statement Rule)

A copy of the rule will be enclosed with permit.

IAPCB Regulation II-2 (Particulate emissions from manufacturing processes)

The PM emissions shall be limited to 0.03 gr/dscf

IAPCB Regulation I (Smoke and other visible emissions)

Visible emissions shall not exceed an average of 30% opacity in 24 consecutive readings.

Air Toxic Emissions

Indiana presently requests applicants to provide information on emissions of the 189 hazardous air pollutants set out in the Clean Air Act Amendments of 1990. These pollutants are either carcinogenic or otherwise considered toxic and are commonly used by industries. They are listed as air toxics on the ERMD Construction Permit Application Form Y.

None of these listed air toxics will be emitted from this proposed construction.

Conclusion

The construction of this Corrugator Line and Cleaver Brooks Boiler will be subject to the conditions of the attached proposed **Construction Permit No. CP-965052-1, Plt ID No. 5052-0001.**